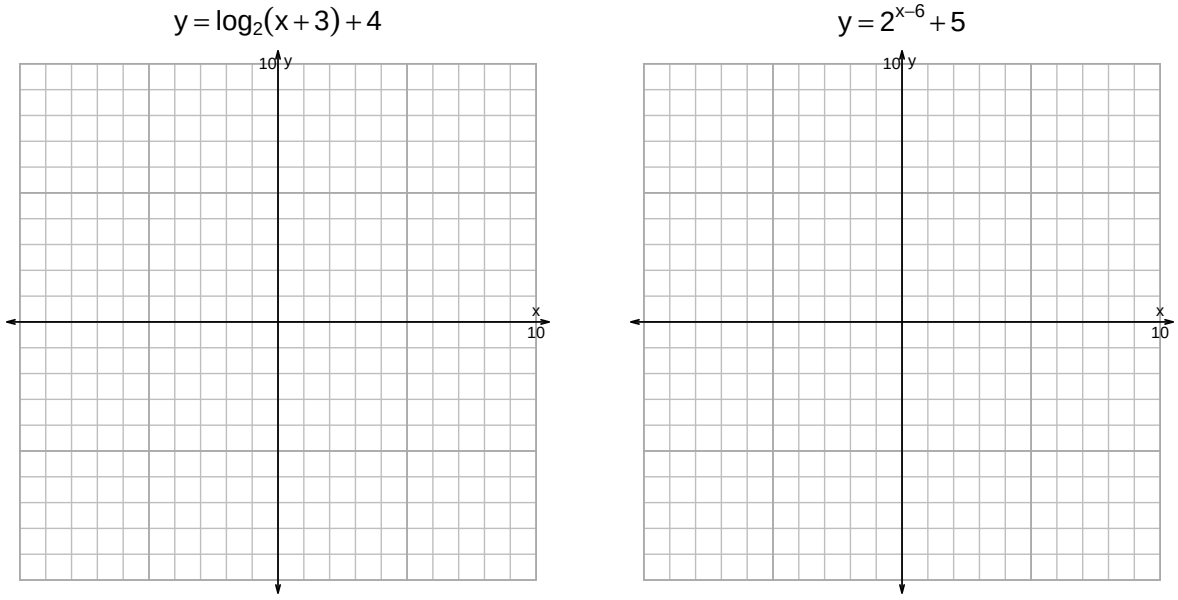
Name: Date:

S18QUIZ: EXP LOG (QUIZ v216)

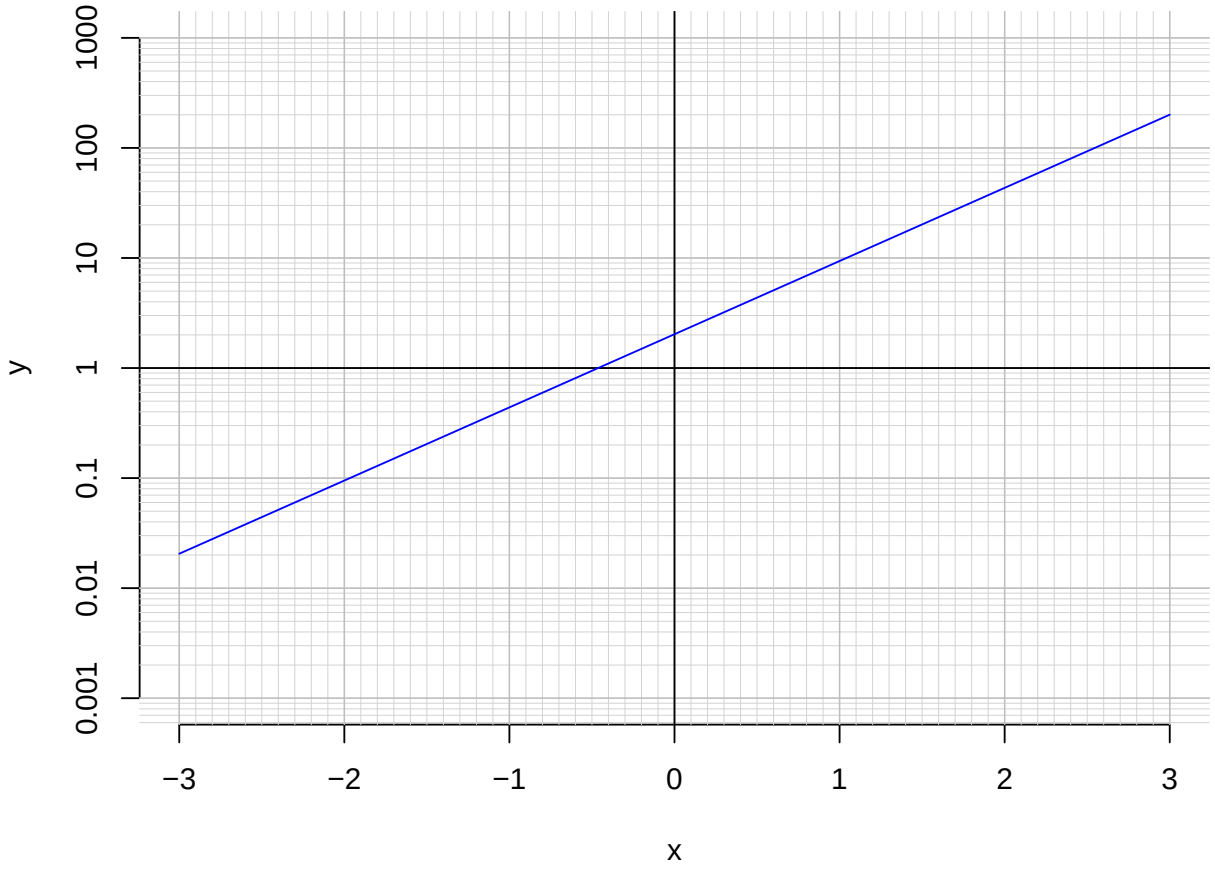
1. Graph $y = \log_2(x+3)+4$ and $y = 2^{x-6}+5$ on the grids below. Also, draw any asymptotes with dotted lines.



2. Write (but do not evaluate) the solution to the equation below by writing a logarithmic expression.

$$29 = \left(\frac{4}{3}\right) \cdot 2^{-5t/7}$$

3. An exponential function $f(x) = 2.03 \cdot e^{1.53x}$ is graphed below on a semi-log plot.



a. Using the plot above, evaluate $f(-2.3)$.

b. Express $f^{-1}(x)$, the inverse of f.

c. Using the plot above, evaluate $f^{-1}(80)$.